



City of Seattle
Norman B. Rice, Mayor



King County
Gary Locke, Executive

Seattle-King County Department of Public Health

Alonzo L. Plough, Ph.D., MPH, Director

January 15, 1997

(b) (6)

c/o: Care Planning Association
101 Yesler Way - Suite 604
Seattle, WA 98104

Dear Mr. (b) (6):

The King County Health Department has completed the site hazard assessment (SHA) of the (b) (6) Property site, located at (b) (6) 20th Avenue South, Burien, as required under the Model Toxics Control Act. A determination of no further action (NFA) at this site has been made by Ecology based on this SHA.

For your information, Ecology will be publishing the results of this, and other recently completed, SHAs in the February 18, 1997 Special Issue of the Site Register.

Ecology reserves the right to initiate further investigation at this site where new information is received indicating a potential/actual threat to human health and/or the environment through the release of hazardous substance(s).

Please contact me at 206-296-4724 if you have any questions/comments regarding this SHA/determination of NFA.

Sincerely,

Carla Gundermann, MSEH, R.S.
Solid Waste Program

cc: Michael Spencer, Washington State Department of Ecology
Norm Peck, Washington State Department of Ecology

**WORKSHEET 1
SUMMARY SCORE SHEET**

Note: This document currently has no provision for sediment route scoring.

Site Name/Location (Street, City, County, Section/Township/Range, TCP ID Number):

(b) (6) Property
(b) (6) 20th Avenue South
Burien, Washington 98168-2305
T-23, R-4E, Sec-9

Site Description (Include management areas, substances of concern, and quantities):

The (b) (6) Property is a private residence located on (b) (6) 20th Avenue South in the City of Burien. All of the properties surrounding this site are also private homes. The site consists of the main residence and several smaller out buildings and is serviced by a municipal water supply and sewer system. No well exists within a 2 mile radius of the property. The yard area is all dirt while the driveway is mostly a soil gravel mix. A slight slope exists and channels surface water runoff into the property.

Mr. (b) (6) had an agreement with a local car garage to store vehicles on his property. This agreement lasted approximately one year and the cars were removed. During this time, various neighbors contacted local and state agencies, including the police, regarding the car storage and solid waste issues. In May of 1993, an anonymous complaint was received by the Department of Ecology regarding the storage of a large amount of automobiles on site and petroleum contaminated soil. The hazardous response team completed an off site initial investigation and confirmed the presence of more than twenty vehicles on site. Due to a volatile confrontation with the property owner, Mr. (b) (6) no visual confirmation was made of the petroleum contamination. The site was placed on the Site Information System (SIS) list maintained by the Department of Ecology for suspected petroleum contamination of both soil and surface water pathways.

A site hazard assessment was conducted by Carla Gundermann of the King County Health Department on October 11, 1996. The property has been abandoned for the past few years due to the death of Mr. (b) (6) and is currently on the market. Two cars, some tires and solid waste debris were observed on site. There was no stained surface soil to indicate any petroleum contamination and also no sheens observed in any standing water on the property. An orange mass composed of various items such as nails, rope and metal pieces embedded in a solid brittle material, was observed north of the eastern most out building. Samples were taken from the orange mass and the surrounding soil as well as a background sample from the front of the property. The surrounding soil sample was taken approximately 1 1/2 feet north of the mass and at a depth of approximately 2 1/2- 3 inches. Analysis revealed an arsenic level at a slightly elevated amount of 22 ppm. A Toxicity Characteristic Leaching Procedure (TCLP) analysis was performed on the solid mass sample and revealed non detectable levels for the RCRA metals. This indicates that arsenic is organically bound in the soil matrix and most likely does not have a propensity to leach out.

Based on the results of the site inspection, that the TCLP analysis revealed non detectable levels of RCRA metals, that the residence is on both municipal water supply and sewer systems, and there are no drinking water wells within a 2 mile radius of the site, the recommendation is that the property be determined a 'no further action' site under Ecology's Model Toxics Control Act.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site):

Not applicable.

ROUTE SCORES:

Surface Water/Human Health: N/A

Surface Water/Environ.: N/A

Air/Human Health: N/A

Air/Environmental: N/A

Ground Water/Human Health: N/A

WARMSSH
Rev. 7/12/94

OVERALL RANK: NFA

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) (6) Property

**TOTAL METALS
EPA 6010/7471**

Date Extracted: 11-04&06-96
Date Analyzed: 11-05&06-96

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-115-2
Client ID: JOP-2s

Analyte	Method	Dilution Factor	Result	PQL
Arsenic	6010	50	22	13.2
Barium	6010	50	130	0.66
Cadmium	6010	50	ND	0.66
Chromium	6010	50	24	0.66
Lead	6010	50	54	6.6
Mercury	7471	50	ND	0.33
Selenium	6010	50	ND	13.2
Silver	6010	50	ND	0.66

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) Property

TOTAL METALS
EPA 6010/7471

Date Extracted: 11-04&06-96
Date Analyzed: 11-05&06-96

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-115-3
Client ID: JOP-3s

Analyte	Method	Dilution Factor	Result	PQL
Arsenic	6010	50	ND	11.4
Barium	6010	50	42	0.57
Cadmium	6010	50	ND	0.57
Chromium	6010	50	14	0.57
Lead	6010	50	22	5.7
Mercury	7471	50	ND	0.28
Selenium	6010	50	ND	11.4
Silver	6010	50	ND	0.57

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) Property

TOTAL METALS
EPA 6010/7471
METHOD BLANK QUALITY CONTROL

Date Extracted: 11-04-96
Date Analyzed: 11-05-96

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1104S1

Analyte	Method	Dilution Factor	Result	PQL
Arsenic	6010	50	ND	10
Barium	6010	50	ND	0.50
Cadmium	6010	50	ND	0.50
Chromium	6010	50	ND	0.50
Lead	6010	50	ND	5.0
Mercury	7471	50	ND	0.25
Selenium	6010	50	ND	10
Silver	6010	50	ND	0.50

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) (6) Property

**TOTAL METALS
EPA 6010/7471
DUPLICATE QUALITY CONTROL**

Date Extracted: 11-04&06-96
Date Analyzed: 11-05&06-96

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-114-2

Analyte	Dilution	Sample Result	Duplicate Result	RPD	Flags	PQL
Arsenic	50	ND	ND	NA		10
Barium	50	41.0	41.3	0.73		0.50
Cadmium	50	ND	ND	NA		0.50
Chromium	50	14.2	14.0	1.2		0.50
Lead	50	ND	ND	NA		5.0
Mercury	50	ND	ND	NA		0.25
Selenium	50	ND	ND	NA		10
Silver	50	ND	ND	NA		0.50

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) (6) Property

**TOTAL METALS
EPA 6010/7471
MS/MSD QUALITY CONTROL**

Date Extracted: 11-04&06-96
Date Analyzed: 11-05&06-96

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-114-2

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	90.9	91	82.8	83	9.3	
Barium	100	130	89	126	85	3.7	
Cadmium	50	41.1	82	41.4	83	0.68	
Chromium	100	102	88	98.5	84	3.8	
Lead	250	195	78	193	77	1.2	
Mercury	2.5	2.26	90	2.18	87	3.4	
Selenium	100	81.5	82	86.9	87	6.4	
Silver	50	30.3	61	29.2	58	3.9	

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) (6) Property

TCLP Metals
EPA 1311/6010/7470

Date Extracted: 11-01-96
Date Analyzed: 11-05-96

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 10-115-1
Client ID: JOP-1s

Analyte	Method	Dilution Factor	Result	PQL
Arsenic	6010	2.0	ND	0.40
Barium	6010	2.0	ND	2.0
Cadmium	6010	2.0	ND	0.02
Chromium	6010	2.0	ND	0.02
Lead	6010	2.0	ND	0.20
Mercury	7470	20	ND	0.01
Selenium	6010	2.0	ND	0.40
Silver	6010	2.0	ND	0.02

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) Property

TCLP Metals
EPA 1311/6010/7470
METHOD BLANK QUALITY CONTROL

Date Extracted: 11-01-96
Date Analyzed: 11-05-96

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: MB1105TCLP1

Analyte	Method	Dilution Factor	Result	PQL
Arsenic	6010	2.0	ND	0.40
Barium	6010	2.0	ND	2.0
Cadmium	6010	2.0	ND	0.02
Chromium	6010	2.0	ND	0.02
Lead	6010	2.0	ND	0.20
Mercury	7470	20	ND	0.01
Selenium	6010	2.0	ND	0.40
Silver	6010	2.0	ND	0.02

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) Property

TCLP Metals
EPA 1311/6010/7470
DUPLICATE QUALITY CONTROL

Date Extracted: 11-05-96
Date Analyzed: 11-05-96

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 11-010-1

Analyte	Dilution	Sample Result	Duplicate Result	RPD	Flags	PQL
Arsenic	2.0	ND	ND	NA		0.40
Barium	2.0	ND	ND	NA		2.0
Cadmium	2.0	ND	ND	NA		0.02
Chromium	2.0	ND	ND	NA		0.02
Lead	2.0	ND	ND	NA		0.20
Mercury	20	ND	ND	NA		0.01
Selenium	2.0	ND	ND	NA		0.40
Silver	2.0	ND	ND	NA		0.02

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) (6) Property

TCLP Metals
EPA 1311/6010/7470
MS/MSD QUALITY CONTROL

Date Extracted: 11-05-96
Date Analyzed: 11-05-96

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 11-010-1

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	4.0	3.95	99	3.89	97	1.6	
Barium	4.0	4.66	116	4.57	114	1.9	
Cadmium	2.0	2.09	104	2.04	102	2.1	
Chromium	4.0	4.14	104	4.08	102	1.4	
Lead	10.0	9.93	99	9.70	97	2.4	
Mercury	0.1	0.11	110	0.107	107	2.8	
Selenium	4.0	4.02	101	3.97	99	1.4	
Silver	2.0	2.03	101	2.27	114	11	

Date of Report: November 7, 1996
Samples Submitted: October 31, 1996
Lab Traveler: 10-115
Project: (b) Property

Date Analyzed: 11-4-96

% MOISTURE

Client ID	Lab ID	% Moisture
JOP-2s	10-115-2	24
JOP-3s	10-115-3	12